

WHAT IS CLAIMED IS:

1. An image processing apparatus for processing  
an image in accordance with property information for  
defining an image processing method for processing  
5 image data of the image, comprising:  
inputting means for inputting the image data, key  
information used for recognizing alteration of the  
image data, and the property information;  
judging means for judging from the image data and  
10 the key information input by said inputting means  
whether the image data was altered; and  
controlling means for controlling an execution of  
the image processing method in accordance with a  
judgement by said judging means and the property  
15 information.
2. An image processing apparatus according to  
claim 1, further comprising an interface for accessing  
a detachable memory wherein the image data, the key  
20 information and the property information are stored in  
the detachable memory.
3. An image processing apparatus according to  
claim 1, wherein the property information defines the  
25 image processing method used for executing printing  
output.

4. An image processing apparatus according to  
claim 1, wherein the property information defines  
contents of the control to be executed by said  
controlling means in accordance with the judgement by  
5 said judging means.

5. An image processing apparatus according to  
claim 1, wherein the image data input by said inputting  
means includes a digital signature, the key information  
10 is key information used for the digital signature, and  
said image processing apparatus further comprises  
digital signature decrypting means for decrypting the  
digital signature by using the key information.

6. An image processing apparatus according to  
claim 5, wherein said judging means executes a  
judgement process by comparing information obtained by  
calculating the image data in a predetermined manner  
with information obtained by said digital signature  
20 decrypting means.

7. An image processing method for processing an  
image in accordance with property information for  
defining an image data processing method, comprising  
25 the steps of:

inputting image data, key information used for  
recognizing alteration of the image data, and the

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property information;

judging from the image data and the key  
information input at said inputting step whether the  
image data was altered; and

5           controlling an execution of the image processing  
method in accordance with a judgement at said judging  
step and the property information.

8. A storage medium storing processor-  
10       implementable instructions for controlling a processor  
to carry out the method on Claim 7.

9. An image processing system with an interface  
capable of accessing a memory medium, comprising:

15           information reading means for reading a digital  
signature of image file data stored in the memory  
medium, a secret key used for the digital signature, or  
a public key paired to the secret key, together with  
the image file data and property information for  
20       defining an image processing method for processing  
image data; and

image output controlling means for outputting an  
image in accordance with information read by said  
information reading means.

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10. An image processing system according to claim  
9, further comprising digital signature decrypting

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means for decrypting the digital signature of the image file data read by said information reading means by using the public key.

5           11. An image processing system according to claim 9, further comprising calculating means for calculating an image file specific value obtained from the image file data by using one-way function.

10           12. An image processing system according to claim 9, further comprising image file data examining means for examining the image file data in accordance with a data value obtained by said digital signature decrypting means and the value obtained by the  
15           calculating means.

          13. An image processing system with an interface capable of accessing a memory medium, comprising:

          memory medium detecting means for detecting a  
20           connection of the memory medium to the interface;  
          information reading means, responsive to a detection of the connection of the memory medium by said memory medium detecting means, for reading a digital signature of image file data stored in the  
25           memory medium, a secret key used for the digital signature, or a public key paired to the secret key, together with the image file data and property

information for defining an image processing method for processing image data; and

image output controlling means for outputting an image in accordance with information read by said  
5 information reading means.

14. An image processing system with an interface capable of accessing a memory medium, comprising:

image file data generating means for generating  
10 image file data to be stored in the memory medium;

image file data storing means for storing the image file data generated by said image file data generating means in the memory medium;

calculating means for calculating an image file  
15 specific value obtained from the image file data by using a one-way function; and

digital signature generating means for generating a digital signature by dencrypting the value calculated by said calculating means by using a secret key stored  
20 in the memory medium.

15. An image processing system according to claim 14, further comprising:

first storing means for storing the digital  
25 signature generated by said digital signature generating means together with property information for defining an image data processing method for processing

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image data in a property area of the memory medium; and  
second storing means for storing the image file  
data to be signed in the memory medium.

5           16. An image processing system according to claim  
14, wherein the secret key for decrypting the value  
calculated by said calculating means is an apparatus  
specific secret key.

10           17. An image processing system according to claim  
14, further comprising secret key generating means for  
newly generating a secret key for decrypting the value  
calculated by said calculating means, in accordance  
with a user definition.

15           18. An image processing method for an image  
processing system with an interface capable of  
accessing a memory medium, the method comprising the  
steps of:

20           reading a digital signature of image file data  
stored in the memory medium, a secret key used for the  
digital signature, or a public key paired to the secret  
key, together with the image file data and property  
information for defining an image processing method for  
25           processing image data; and

            outputting an image in accordance with information  
read at said information reading step.

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connection of the memory medium at said memory medium  
detecting step, of reading a digital signature of image  
file data stored in the memory medium, a secret key  
used for the digital signature, or a public key paired  
5 to the secret key, together with the image file data  
and property information for defining an image  
processing method for processing image data; and  
outputting an image in accordance with information  
read at said reading step.

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23. An image processing method for an image  
processing system with an interface capable of  
accessing a memory medium, comprising the steps of:

generating image file data to be stored in the  
15 memory medium;

storing the image file data generated at said  
image file data generating step in the memory medium;

calculating an image file specific value obtained  
from the image file data by using a one-way function;  
20 and

generating a digital signature by dycrypting the  
value calculated at said calculating step by using a  
secret key stored in the memory medium.

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24. An image processing method for an image  
processing system according to claim 23, further  
comprising the steps of:



storing the digital signature generated at said digital signature generating step together with a property file in a property area of the memory medium; and

5 storing the image file data to be signed in an image file area of the memory medium.

25. An image processing method according to claim 20, wherein the secret key for decrypting the value  
10 calculated at said calculating step is an apparatus specific secret key.

26. An image processing method according to claim 20, further comprising a step of newly generating a  
15 secret key for decrypting the value calculated at said calculating step, in accordance with a user definition.

27. A memory card storing:  
image data file;  
20 digital signature information of said image data file;  
secret key information used for the digital signature;  
public key information paired to said secret key;  
25 and  
property information defining an image processing method for processing image data.

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30. A storage medium storing processor-implementable instructions for controlling a processor to carry out the method on Claim 23.